

Background Checks and Firearms in the Community: **A Missouri Firearms Survey Report**



**INSTITUTE FOR FIREARM
INJURY PREVENTION**
UNIVERSITY OF MICHIGAN

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**Prepared by the University of Michigan
Institute for Firearm Injury Prevention and
Missouri Foundation for Health**

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*Missouri Foundation
for Health*

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About the University of Michigan's Institute for Firearm Injury Prevention: The Institute for Firearm Injury Prevention at the University of Michigan fosters collaboration among researchers in disciplines ranging from the social sciences and the arts to engineering and public health to formulate and answer critical questions about firearm injury prevention. Learn more at firearminjury.umich.edu.

About Missouri Foundation for Health: Missouri Foundation for Health is building a more equitable future through collaboration, convening, knowledge sharing, and strategic investment. Working in partnership with communities and nonprofits, MFH is transforming systems to eliminate inequities within all aspects of health and addressing the social and economic factors that shape health outcomes. Learn more at mffh.org.

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EXECUTIVE SUMMARY

In July of 2020, Missouri Foundation for Health (MFH) conducted the Missouri Firearms Survey (MFS) of over 1,000 Missouri adults to understand firearm-related beliefs, attitudes, perceptions, and behaviors within the state with the intent of informing stakeholders interested in firearm injury and death prevention. We identify **key trends and recommendations** in this topical report below:

Key Trends Related to Firearm Attitudes and Behaviors

- Attitudes and practices related to background checks among Missouri firearm owners are comparable. 57.8% agreed that background checks are acceptable when selling a gun to a stranger, and 54.7% underwent a background check. The process of background checks also depended on the purchase location. Gun stores, sporting goods stores, and gun shows had the highest reported rate of background checks.
 - **Implications:** Undergoing background checks may be based on existing attitudes toward background checks. Missouri does not require background checks if firearms are sold by a private seller.¹ Public health and community groups can engage firearm owners to normalize background checks and frame them as an acceptable and important aspect of firearm safety and responsibility.
- Public carriage in Missouri is supported by the majority of firearm owners, with exception to bars, government buildings, and sports stadiums. Moreover, firearm owners who received formal firearms training, live in suburban and rural areas, and own a firearm for protection are more likely to support firearm carriage in public places. Nearly 4 in 10 firearm owners who support firearm carriage in public places also carried a loaded firearm in public. The primary reason for carriage was protection against strangers.
 - **Implications:** Missouri law allows individuals to carry concealed, loaded handguns in public without a concealed carry permit. Schools and churches are some of the only places in which firearm carriage is prohibited.² Research shows that firearm carriage increases violent crime, the risk of suicide by a firearm, unintentional firearm injury, and mass shootings.³⁻⁶ More research is needed to understand why people feel the need to carry firearms, including psychological, social, and cultural reasons. Public health practitioners could then design firearm safety programs, that address the multiple factors related to firearm carriage.
- Though concealed carry weapon (CCW) permits are not required to carry a firearm in public, nearly 1 out of 3 Missouri firearm owners hold a CCW permit. Firearm owners who are older than 30, Black, live in suburban or rural areas, and own a firearm for protection are more likely to have a CCW permit. Further, people with firearms training are more likely to have a CCW permit due to the required formal training.
 - **Implications:** Since CCW permits are not required in Missouri to carry firearms in public, some firearm owners may engage in risky firearm carriage practices (example: carrying a firearm without the safety engaged).² Permitless firearm carriage has been associated with increased violent crime and officer-involved shootings suggesting that readily available handguns may lead to violence when perceived threats or conflicts come up.⁷ Police may perceive more threats if anyone they encounter could have a gun and act in a more defensive, forceful manner.³⁰ With more research, its impact on suicide, unintentional injury, and mass shootings will be clearer.

DATA CONSIDERATIONS

Firearms and firearm ownership are highly divisive topics in the United States. As a result, some survey respondents may feel pressure to respond in a way that they think is socially acceptable. Lack of trust and skepticism may also prevent people from disclosing that they own firearms. Despite this limitation, questions were asked using a web-based platform and confidentiality was assured to enhance the likelihood of respondents providing truthful answers to the survey questions. Caution should be used when interpreting results of the MFS, as they reflect the views of respondents and may not fully capture the nuance of experiences, attitudes, and beliefs of other Missourians.

INTRODUCTION

MFH and its key stakeholders seek to understand firearm-related beliefs, behaviors, and attitudes among Missourians to design and implement effective firearm injury prevention strategies. This report highlights key trends from the MFS related to attitudes, beliefs, and behaviors related to background checks in firearm sales and firearm carriage.

The current state of firearm policies in Missouri may impact background check practices and firearm carriage. For instance, in 2021, Missouri legislation enacted the “Second Amendment Preservation Act” which fines local and state law enforcement \$50,000 for enforcing federal gun laws, which includes the federal background check requirement for federally licensed firearm dealers. In March of 2023, a federal court deemed the “Second Amendment Preservation Act” unconstitutional, but allowed the law to stay in place pending appeals.⁸ Missouri has only federal law for **background checks**, which requires federally licensed firearms dealers to initiate a background check prior to the sale.⁸ In turn, private sellers are not required to initiate a background check when selling or transferring ownership of their firearm. Private sellers are considered to be anyone outside of a federally licensed dealer,¹ and private sales may occur via online marketplaces, at a gun show, or in private between individuals. Background checks can be used to enforce firearm prohibitions for those who are at-risk of harming themselves or others, such as those with a history of suicidal attempts or felons. Missouri law also prohibits any person from denying a sale of a firearm to a person who does not possess a Federal Firearms License.⁹

As of January 2017, **concealed carry** is allowed in most locations in Missouri without obtaining a permit. Locations that are restricted include places of worship, election precincts on election day, government buildings, and on the premises of any function or activity sponsored or sanctioned by school officials or the district school board, including a school bus.¹⁰ Individuals do not violate Missouri law in these places if the firearm is not readily accessible, if the person with a concealed firearm has authority or control in the premises (e.g., law enforcement officer), or if someone is in hunting using an exposed firearm in addition to their concealed firearm. Missouri still maintains a concealed carry permitting system despite the state’s lack of concealed carry restrictions. County and city sheriffs, or their designees, can grant concealed carry permits. Permits can be standard (5 years), extended (10-25 years) or lifetime in length.² Missouri’s permit law requires applicants to demonstrate knowledge of firearm safety training.² Firearm training practices and beliefs will be covered in a future report.

Background checks and firearm carriage are two manners in which people interact with firearms; therefore, we need to understand both attitudes and practices related to these policies. For example, if a firearm owner believes that utilizing a background check in a firearm transfer, even if it is a private sale, is important, then they may be more likely to actually engage in the background check process, through which firearm prohibitions can be enforced. This could make for less firearm injury and death.

As previously presented in the [introductory report](#), the MFS asked participants to identify the type of firearm they own, the primary reason they own each type of firearm, and demographic and contextual information for these firearm owners. Additionally, the Introductory Report summarizes the non-firearm-owning respondents, which we separate into two groups: those who do not own a firearm but live in a household with a firearm and those who do not own a firearm and do not live in a household with a firearm. For more summary statistics and trends of the MFS participants, please reference the [introductory report](#).

METHODS

Results presented in this report come from the MFS which was conducted by Ipsos on behalf of MFH in July and August of 2020. The MFS was an online survey of 1,045 Missouri adults; 37% of whom reported personally owning firearms. Statistical weighting was used to ensure that the survey data and trends represent firearm-related beliefs, attitudes, and behaviors of Missouri adults (age 18 or older). Additionally, firearm-owning and rural Missourians were oversampled to generate reliable insights about their firearm-related beliefs, attitudes, and behaviors. Specifically, 388 Missouri adults identified as a firearm owner, 158 identified as non-firearm owner living in a household with a firearm, and 499 identified as a non-firearm owner living in a household without a firearm. While most survey questions were close-ended (multiple choice), a few open-ended questions (written answers) were also utilized in the survey to gain deeper insights into firearm-related beliefs and practices among Missourians. Data analysis involved summarizing whether Missourians believe that firearms make the home a safer place to be. We also summarized attitudes and behaviors related to firearm storage. To provide context to the survey results, we also examined whether attitudes and behaviors varied based on individual (e.g., veterans vs. non-veterans), family (e.g., people who grew up with firearms in the home), and community characteristics (e.g., perceptions of neighborhood safety). Additional information about sampling, weighting, and data analysis is included in Appendix A in the [introductory report](#).

A majority of all respondents believe that background checks should be required before private sales to strangers.

BACKGROUND CHECK FOR PRIVATE FIREARM SALES

To assess attitudes about background checks during a firearm transaction, MFS respondents were asked whether they agree with the following statement: “whether it is legal or not, it is not acceptable to sell a gun to a stranger without a background check.” This attitude varied among firearm owners, non-firearm owners living in a household with a firearm, and non-firearm owners living in a household without a firearm. As shown in Figure 1, most non-firearm owners living in households with a firearm (79.1%) and non-firearm owners who do not live in a household with a firearm (74.9%) agreed that it is not acceptable to sell a gun to a stranger without a background check. Fewer firearm owners agreed (57.8%).

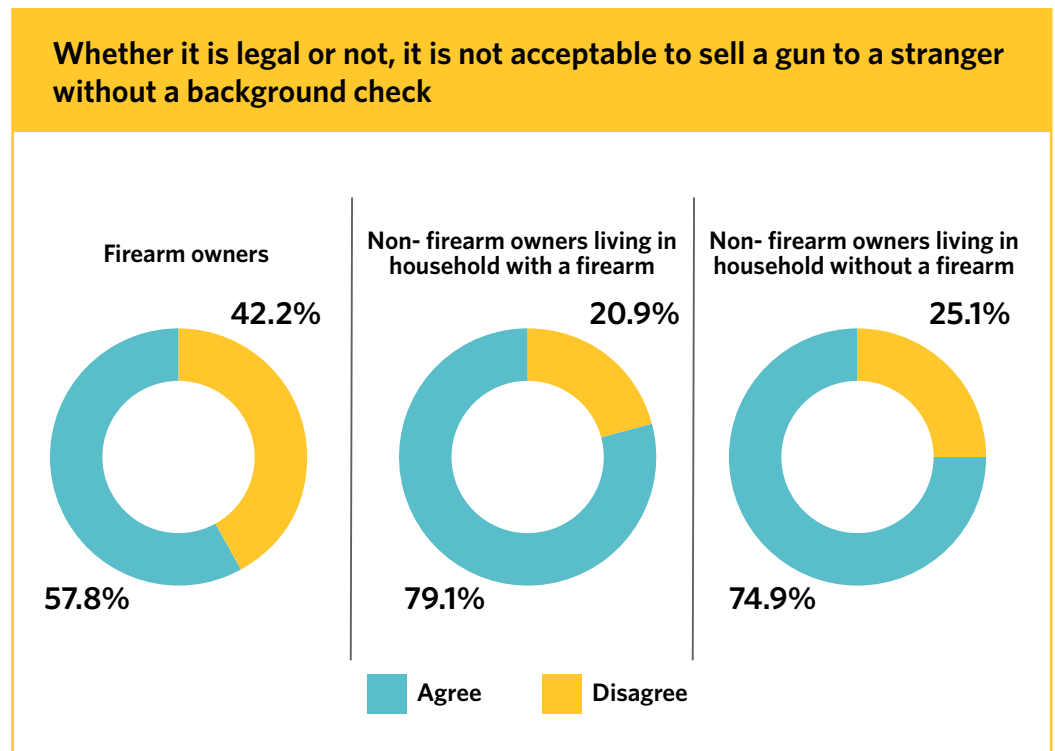


Figure 1

We examined individual, family, and community level factors related to whether it is not acceptable to sell a gun to a stranger without a background check. Individuals who identified as male, owned a firearm, live in a suburban area, and received firearms training without a suicide prevention component were less likely to support this statement. In contrast, individuals ages 45-59 and with a bachelor’s degree or higher were more likely to agree with this statement (Table 1).

Whether it is legal or not, it is not acceptable to sell a gun to a stranger without a background check*

Less likely to agree	More likely to agree
<ul style="list-style-type: none"> Male Firearm owner Live in suburban area Received firearm training without a suicide prevention component 	<ul style="list-style-type: none"> Ages 45-59 Bachelor’s degree or higher

Table 1

As part of the firearm transfer process, approximately 54.7% of firearm owners in the MFS underwent a background check, whereas 36.3% did not undergo a background check and 9.0% were not sure whether they underwent a background check (Figure 2).

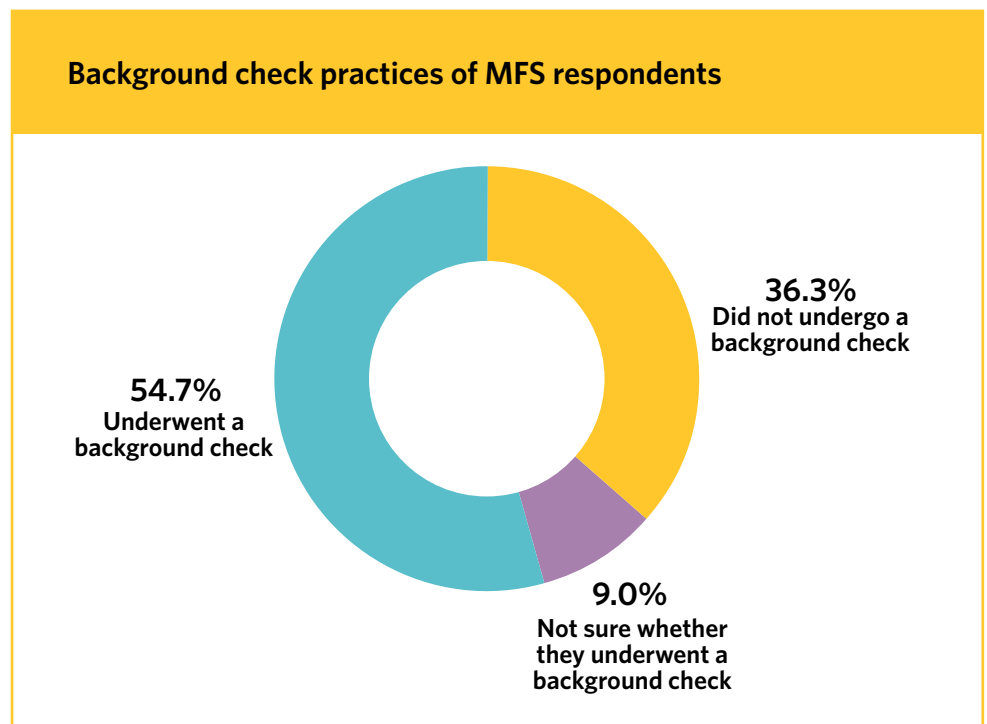


Figure 2

* For all logistic regression models in this report, predictors included factors including gender (0 = female, 1 = male), age groups (0 = 18-29 years old, 1 = 30-44 years old, 2 = 45-59 years old, 3 = 60+ years old), racial/ethnic group identity (0 = White, 1 = Black, 2 = Hispanic and races/ethnicities other than white), educational attainment (0 = less than a high school degree, 1 = graduated high school, 2 = completed some college or an Associate degree, 3 = completed a Bachelor’s degree or higher), veteran status (0 = not a veteran, 1 = veteran), firearm ownership status (0 = not a firearm owner, 1 = firearm owner), firearm at home (0 = no firearms at home, 1 = firearm(s) at home), formal firearm training (0 = No training, 1 = formal training without suicide prevention training, 2 = formal training with suicide prevention training), community type (0 = suburban, 1 = rural, 2 = urban), grew up with a firearm in the home (0 = no, 1 = yes), fear of community violence (0 = never afraid to 4 = always afraid), and children present in the household (0 = no, 1 = yes). For predictors with more than 2 categories (e.g., community type, educational attainment), variables were dummy-coded and the category corresponding to “0” was the reference group. For models estimated on firearm owners only, we did not include firearm ownership or firearm at home as a predictor as these variables have a variance of zero.

People who purchased a firearm at a gun stores had the highest rate of completing background checks.

Moreover, location of firearm purchasing can also influence whether firearm owners underwent a background check. Of note, firearm owners who obtained their most recent firearm from either a gun store (91.8%) or sporting goods store, big box store, or agriculture/farming supply store (78.1%) were more likely to undergo a background check. Next, slightly more than half of firearm owners who purchased their most recent firearm at a gun show (58.4%) or flea market/pawn shop (51.9%) had undergone background check. Lastly, firearm owners who obtained their most recent firearm in an unspecified location or by other means not covered in the survey question, such as purchasing from a family member or friend, were the least likely to undergo a background check (23.2%) (Figure 3).

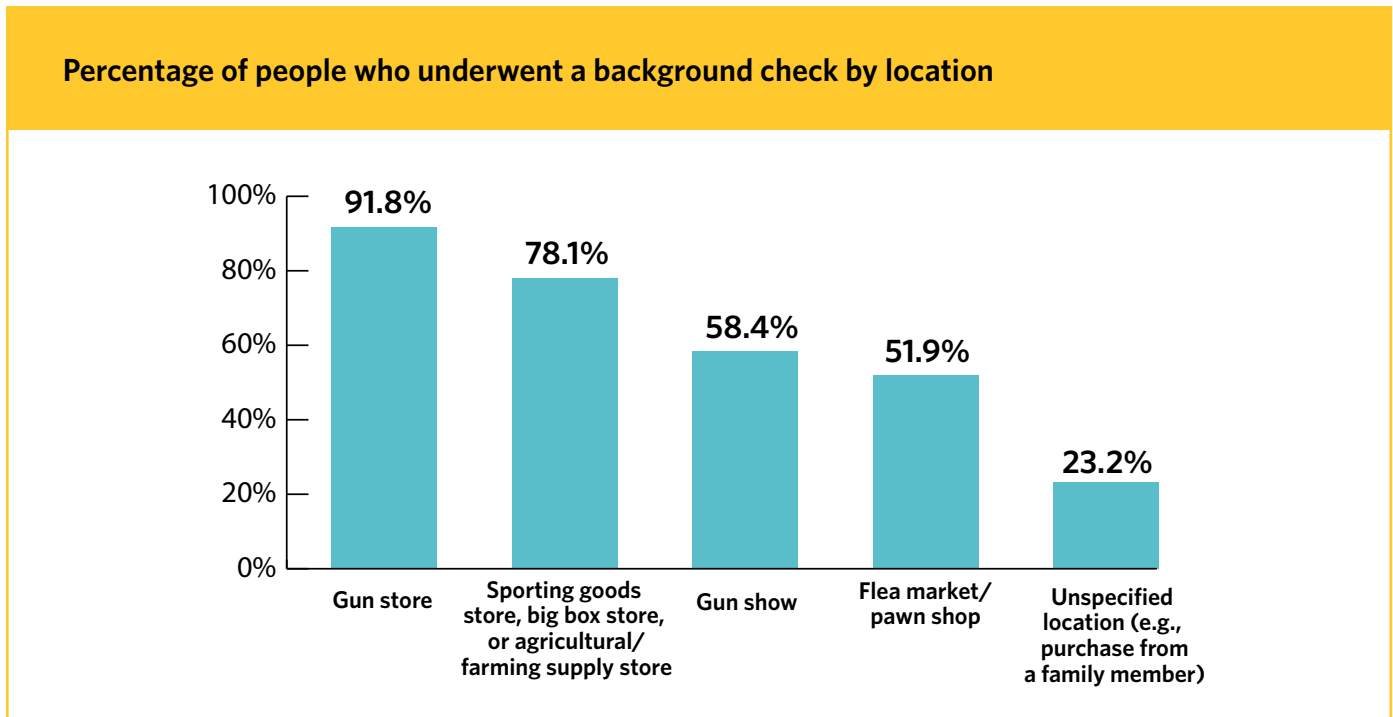


Figure 3

We examined factors at the individual, family, and community levels associated with undergoing a background check (Table 2). Individuals who self-identified as non-Hispanic Black, received formal firearms training without a suicide prevention component, live suburban or rural area, and own their firearm for protection, were more likely to undergo a background check as part of a firearm transaction.

As far as you know, as a part of the transfer, did you undergo a background check (among firearm owners)?*

Less likely to agree	More likely to agree
<ul style="list-style-type: none"> no significant predictors 	<ul style="list-style-type: none"> Ages 30-59 Non-Hispanic, Black respondents Firearms training without a suicide prevention component Live in a suburban or rural area Firearm ownership for protection

Table 2

Missouri Data in Context: Missourians' beliefs around acceptability of selling firearms to strangers without a background check are not consistent with national results; for Missouri, 57.8% of respondents agreed that it is not acceptable, while 72% of respondents nationally agreed it is not acceptable.¹¹ This may be due to the combination of social norms around firearm ownership or the right to bear arms, precedent set by permissive state policies, and/or beliefs about the role of government in firearm regulation. Currently, the federal background check process depends on the state's voluntary participation and on the state's compliance enforcement. There is no Missouri state law requiring background checks or firearm permits for non-licensed sellers engaging in firearm sales, which are referred to as private sales such as online transactions, at gun shows, or from one individual to another. Missourian firearm owners may, therefore, be opposed to background checks for private firearm sales as they may represent further government involvement in private activities.¹¹ Notably, a 2022 national survey found that certain provisions boosted agreement in background checks; for example, 25.0% of gun owners would only support universal background checks if it provided a way to sell or transfer firearms to family members without having to go through a federally licensed firearm dealer.¹² Another popular provision, with 25.7% agreement from gun owners nationally, is that a universal background check law would need to require a timely response from the NICS check system, such as within 72 hours.¹² It can be inferred that a proportion of firearm owners across the country may believe that expanded background checks can keep them from transferring firearms to family members and that expanded background checks may take too long. Further research is needed to understand Missouri-specific preferences on policy actions such as expanded background checks.

According to the FBI, the NICS database ran 54,490 background checks for private sales in 2020.¹³ This means that private sellers initiated a background check at a federal firearm licensee, such as at a gun store. In 2021, there were 208,588 background checks of the same nature.¹³ While national rates of background check utilization in private firearm sales is not available, one can assume these background checks in private sales were majority conducted in states that require them. States with universal background check policies include California, Colorado, Connecticut, Washington D.C., Delaware, Maryland, Nevada, New Jersey, New Mexico, New York, Oregon, Rhode Island, Vermont, Virginia, and Washington.¹⁴ Recently, the Bureau of Alcohol, Tobacco, Firearms and Explosives proposed a new rule that classifies gun show sellers (previously considered private sales) as a federal firearm license dealer. This will likely lead to further utilization of background checks if instituted.¹⁵

Implications for research practice: Future research could explore the nuances in firearm owners' knowledge of and attitudes toward background checks, particularly as it relates to federal or state government-imposed requirements versus voluntary background checks. Because public opinion of firearms is often tied to social norms, public health campaigns could aim to shift narratives around the benefit of universal firearm background checks (including for private sales) and limitations of existing requirements, in order to increase the acceptance of this practice. States that go beyond the federal background check requirements have seen significant reductions in firearm-related homicides, suicide, and trafficking.¹⁶⁻¹⁸ The public may be unaware of this, so integrating this message into culturally-relevant public health messaging could be beneficial as well. The utility of state-level requirements (to supplement and fill gaps of the existing federal systems) may not be widely understood and prevent support for additional state-level efforts and policies. An important tactic in this effort is engaging non-profits, faith-based communities, health providers, law enforcement agencies, and other community sectors in normalizing universal background checks as an acceptable and important practice for promoting firearm safety.¹¹ Prevention groups should work with communities to learn more about concerns or misconceptions related to background checks and identify trusted messengers to promote the importance of firearm safety measures, including background checks and how checks can potentially prevent firearm injury and death. Existing evidence shows that common concerns around background checks are that they are an invasion of privacy, that the NICS system is flawed and the background checks would cause false-positives, or that criminals would get firearms anyways.¹⁹ Understanding what concerns are most important to Missouri firearm owners would allow for a localized and specific approach.

Less than half of respondents believed that people should be allowed to carry firearms in schools, bars, government buildings, or sports stadiums, regardless of firearm ownership.

ATTITUDES AND PRACTICES RELATED TO FIREARM CARRIAGE IN PUBLIC PLACES

The majority of firearm owners supported firearm carriage in public places, including places of worship (57.3%), service settings (62.7%), retail stores (64.9%), and restaurants (66.1%). On the other hand, less than half of Missouri firearm owners supported carrying firearms in sports stadiums (39.7%), government buildings (38.2%), bars (34.5%), college campuses (49.1%), and schools (43.7%). The majority of individuals who do not own firearms, regardless of whether they reside in a household with or without firearms, did not endorse firearm carriage in public places (see Figure 4). However, non-firearm owners residing in households with firearms showed a greater tendency to support firearm carriage in public places compared to those living in households without firearms. This contrast was particularly noticeable in retail stores and service settings.

We examined individual, family, and community level factors that influence attitudes about firearm carriage in public places. Of note, MFH respondents were given a score of 1 if they believed that people authorized to carry firearms should be able to bring their firearm to any of the public places represented in Figure 4. Alternatively, respondents were given a score of 0 if they believed that people authorized to carry a firearm should not be able to bring their firearms to the public places represented in Figure 4.

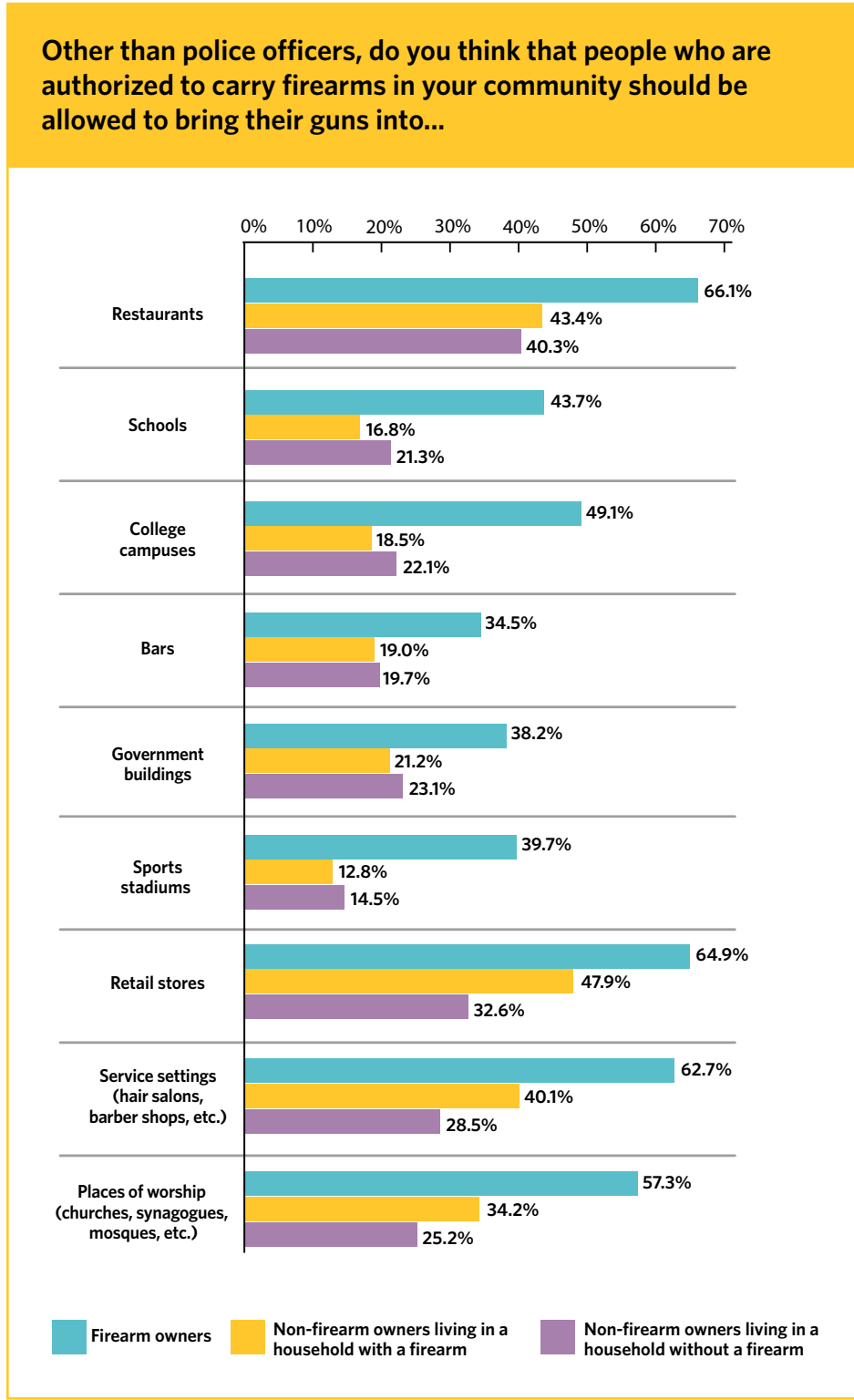


Figure 4

Among all MFS respondents, individuals who are 60 years or older and who have a bachelor’s degree or higher were less likely to agree with firearm carriage in public places (Table 3). In contrast, individuals who have undergone firearms training, whether with or without a suicide prevention component, who reside in suburban or rural areas, and who personally own firearms were more inclined to agree that individuals should be permitted to carry their firearms in public areas, provided they have the authorization to do so.

Predictors of agreement with carrying guns in public space

Less likely to agree with firearm carriage in public places	More likely to agree with firearm carriage in public places
<ul style="list-style-type: none"> ▪ Ages 60+ ▪ Bachelor’s degree or higher 	<ul style="list-style-type: none"> ▪ Received firearms training with or without a suicide prevention component ▪ Live in suburban and rural areas ▪ Firearm owner

Table 3

Among firearm owners, non-Hispanic, Black respondents were less likely to agree with firearm carriage in public places. Conversely, individuals with firearms training (excluding suicide prevention), residing in rural/suburban areas, fearing community violence, and possessing firearms for protection, were more likely to support authorized public firearm carriage (Table 4).

Predictors of agreement with carrying guns in public space (firearm owners)

Less likely to agree with firearm carriage in public places	More likely to agree with firearm carriage in public places
<ul style="list-style-type: none"> ▪ Non-Hispanic, Black respondents 	<ul style="list-style-type: none"> ▪ Received firearms training without a suicide prevention component ▪ Live in suburban and rural areas ▪ Expressed fear of violence in their neighborhood ▪ Owning a firearm for protection

Table 4

Just under a third of firearm owners reported carrying a loaded gun on their person in the past month

Regarding the carrying of loaded handguns in public spaces, 31.9% (N=112) of firearm owners reported carrying a loaded handgun in the past month. Of those who carried a loaded handgun, 62.5% reported carrying a loaded handgun on their person for more than 5 days out of the last 30 days (Figure 5).

It is also important to note that, among firearm owners, supporting firearm carriage in public spaces was linked to carrying a loaded handgun in the previous month. †

Specifically, as shown in Figure 3, 40.9% of firearm owners who agreed with firearm carriage in public places also carried a loaded handgun in the past month. In contrast, 14.5% of firearm owners who disagreed with the statement carried a loaded handgun in the past month (Figure 6).

Number of days a loaded handgun was carried in public places over the past month

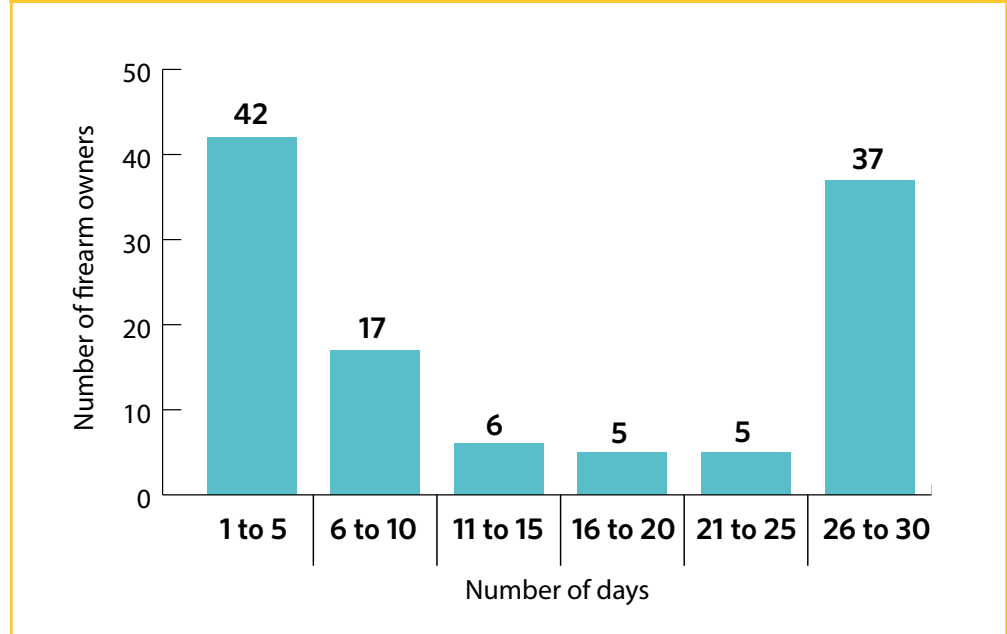


Figure 5

Support for firearm carriage in public places and carriage of loaded handguns

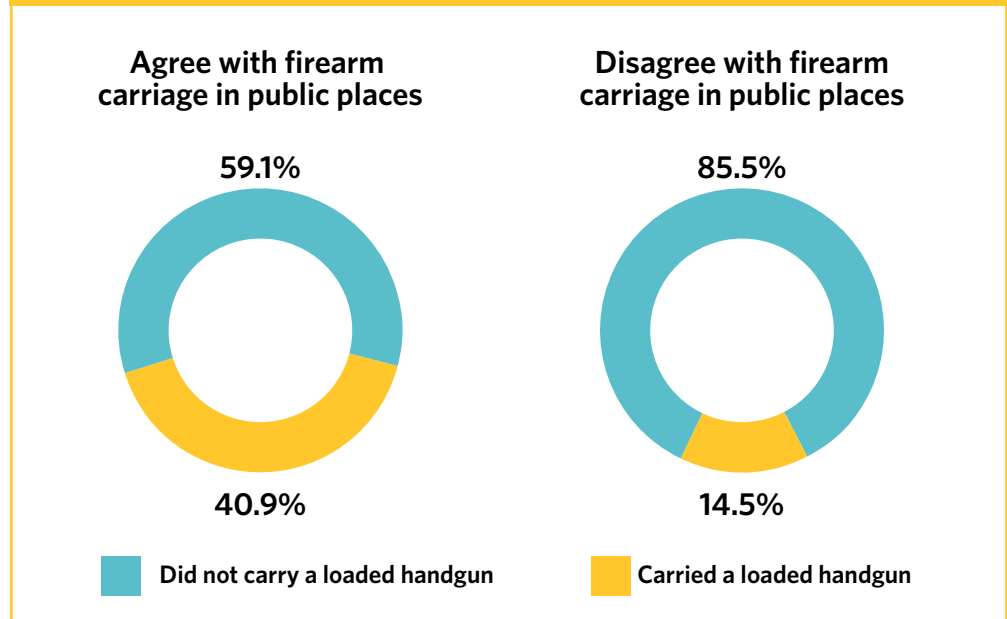


Figure 6

† Chi-square test was conducted to evaluate the association between supporting firearm carriage in public places and actual firearm carriage in the past 30 days ($X^2 = 24.75 (1), p < .001$)

Firearm owners who carried a loaded handgun in the past 30 days were also asked, “What was the primary reason you carried a loaded handgun in the past 30 days?” The overwhelming majority of firearm owners (74.2%) reported they carried a loaded handgun as protection from strangers (Figure 7). A small percentage of firearm owners reported carrying a loaded handgun to protect themselves against people they know (2.8%), protect themselves against animals (2.5%), to transport their guns to or from work (1.7%), for use at work (4.9%), to transport their gun to or from a shooting range (5.4%), or for some other reason (8.5%).

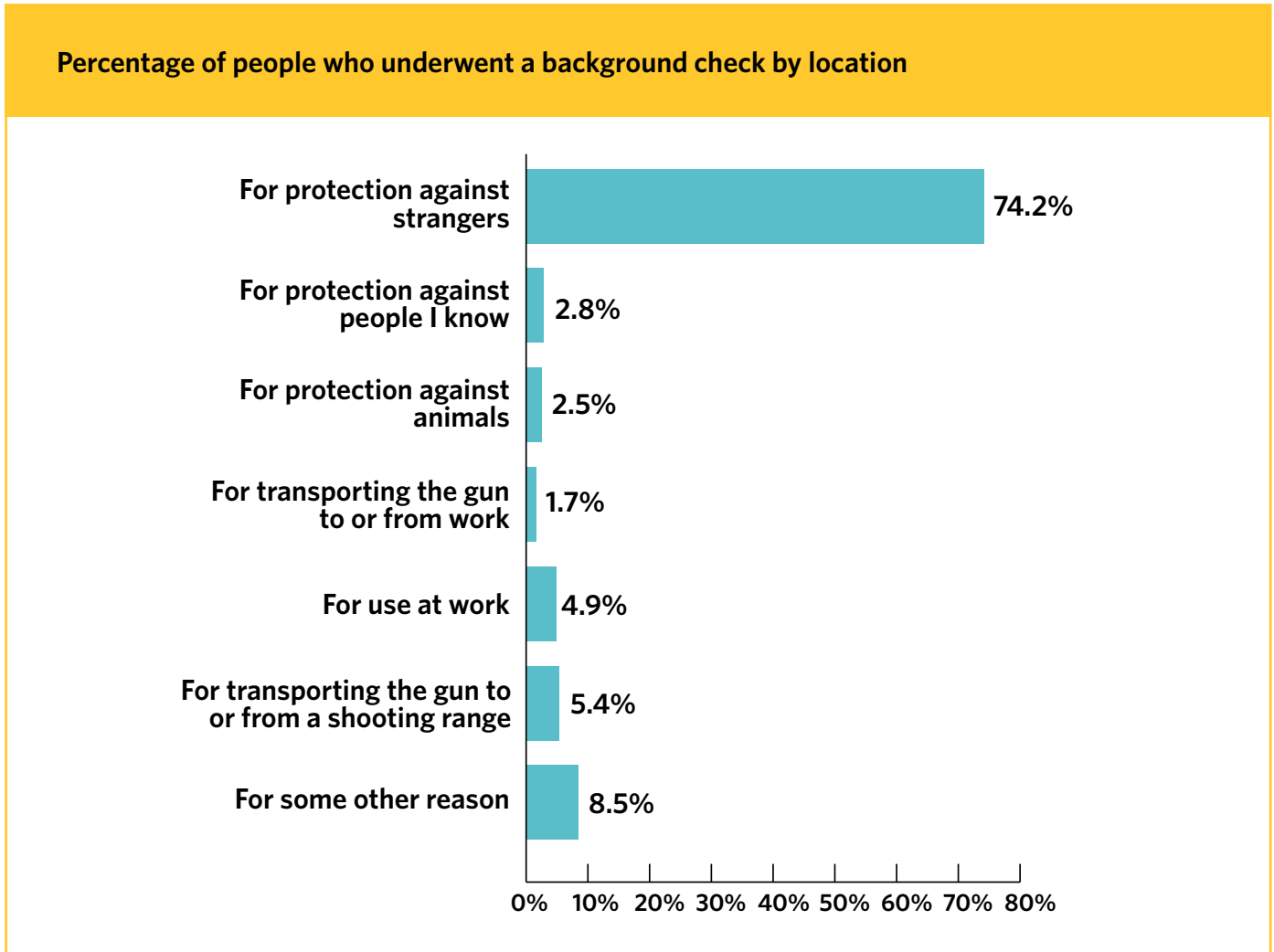


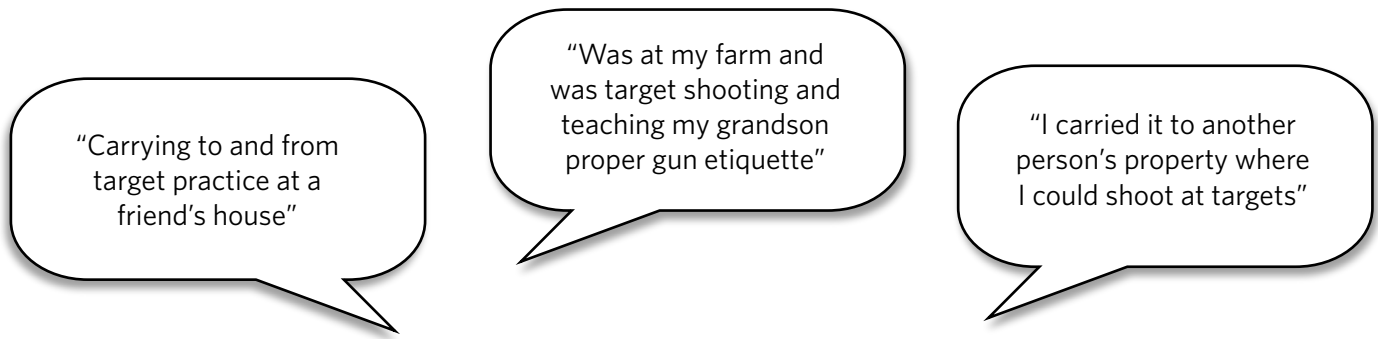
Figure 3

Participants who indicated “for some other reason” were asked to specify their primary reason for carrying a loaded handgun in the previous month. The most frequently reported response included protection against anything (40%). Examples of responses include:

“For protection from anything”

“Defense in general, whether human or animal”

The next frequently reported responses related to target practice outside of a shooting range. Examples of responses include:



Lastly, additional answers included citing possession of a concealed carry permit, invoking Second Amendment rights, and aligning with all the reasons represented in Figure 8. Examples of responses include:



"Other" reasons way people carried a loaded handgun in the past 30 days

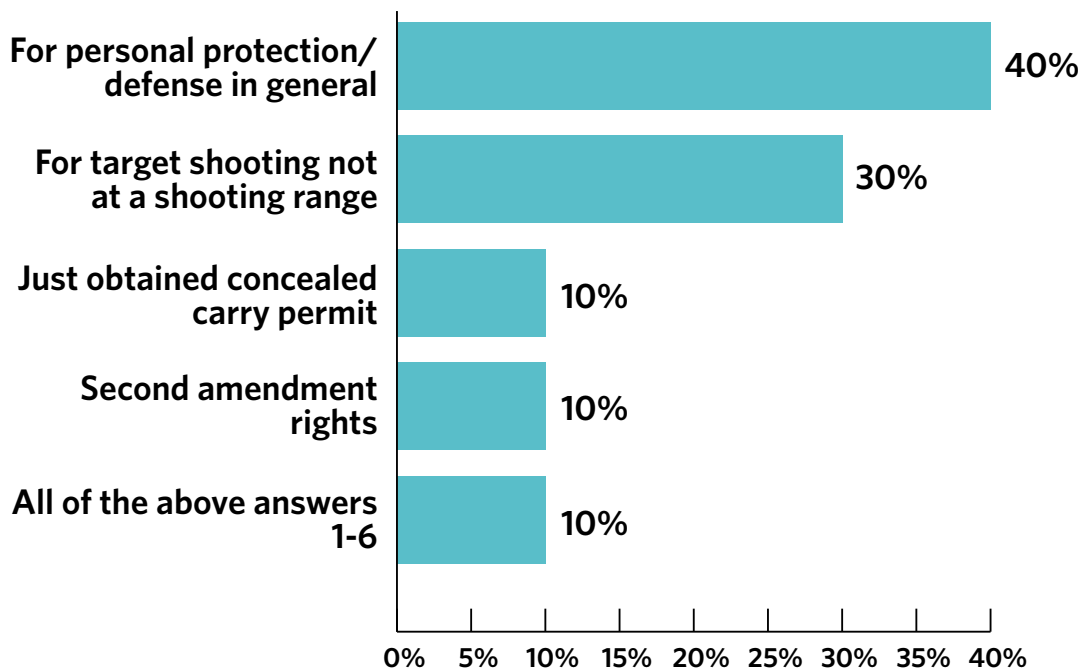


Figure 3

Missouri Data in Context: In a national study, most firearm owners indicated that firearm carriage should be allowed in restaurants (59%), but not in bars (26%) and sports stadiums (27%).²⁰ However, firearm owners in Missouri were generally more permissive of carrying firearms in public spaces. The results demonstrate that opinions on whether firearms should be authorized to be carried in public places differ based on a variety of factors, such as education, location, and familiarity with firearms (e.g., having a firearm in the home, owning a firearm for protection). Permissive public carrying attitudes among participants with previous firearm training may reflect greater confidence in their ability to carry and use their weapon if a situation necessitated it.²¹ Rural residents may be more familiar with gun culture and public display of guns than other groups.²² Adults with children in the home may hold more permissive attitudes about public carrying due to a desire to not only protect themselves, but also their kids in potentially dangerous situations.²³

In Pew Research's 2017 national data on firearm carriage, researchers found that 26% of handgun owners surveyed carry their firearm outside of the home, not including when they are transporting the firearm.²⁴ Of these respondents engaging in firearm carriage outside of the home, 11% carried their firearm all the time, 31% some of the time, and 43% never.²⁴ In this nationally representative data, researchers found that an equal amount of men and women carried outside of the home and there were no other significant differences by education, region, or community type.²⁴ In another nationally representative dataset, firearm carriage was more common among younger, male, and owned both handguns and long guns.²⁵ Carriage was more common among firearm owners that consider ownership a key part of their identity – 78% of those who consider their firearm a key part of their identity carry their firearm outside of the home at least some of the time.²⁵ Those who view their firearm as essential to their personal freedom also carried their firearms more than those who did not consider their firearm as essential to personal freedom.²⁵ While the MFS did not measure identity aspects of firearm ownership, this is an important area for future research.

Notably, handgun owners in the Pew dataset that felt unsafe in their communities were more likely to carry, with 41% of respondents carrying all or most of the time when they consider their community “not too or not at all safe.”²⁴ In regards to reasons for carriage, another nationally representative data source shows that 70% of people who carried handguns did so for protection against other people.²⁵ Missouri trends slightly higher; additionally, the MFS separated out protection against strangers and protection against people they know where the national survey was not worded as such. National data showed a similar 8.5% of “for some other reason” respondents, but these other responses were not reported on further.²⁵

Implications for research and practice: These results are significant particularly given that Missouri state law allows people to carry hidden, loaded handguns in public without a permit or safety training.²⁶ Additionally, there are no state laws prohibiting the carry of concealed firearms in most locations (with the exception of churches and schools).² Instead, cities and businesses sometimes decide where firearms are permitted, though state policies have attempted to remove barriers to firearm carrying in public places. There is much discussion around allowing firearms in public places as a deterrent for mass shootings, but evidence is limited for this assertion.²⁷ There is evidence that concealed carry increases violent crime, and evidence is currently inconclusive on how concealed carry impacts suicide, unintentional injury, and mass shootings.²⁷ Future research needs to investigate the impacts of concealed carry policies on these firearm injury and death. Additionally, future research should seek to understand how reasons for carrying firearms in public settings differ across populations (e.g., veterans, firearm owners in rural areas) and identities (e.g., if someone considers their firearm important to their identity or personal freedom). For instance, people living in economically challenged cities with a high prevalence of violent crime may carry firearms to deter crime and promote a sense of safety. Understanding these attributions can play a key role in designing firearm safety training programs. In addition, identifying community settings where people desire to carry firearms can help public health practitioners identify spaces and situations in a community where people feel threatened or unsafe.

Just under a third of firearm owners have a concealed carry permit, despite it not being a requirement in Missouri.

CONCEALED CARRY PERMIT PRACTICES

Lastly, we explored the proportion of adults in Missouri, particularly among firearm owners, who possess concealed carry permits, commonly known as CCW permits. Among firearm owners, 30.3% hold CCW permits. Additionally, non-firearm owners who reside in households with or without a firearm, 7.5% and 3.5%, respectively, hold CCW permits (Figure 9).

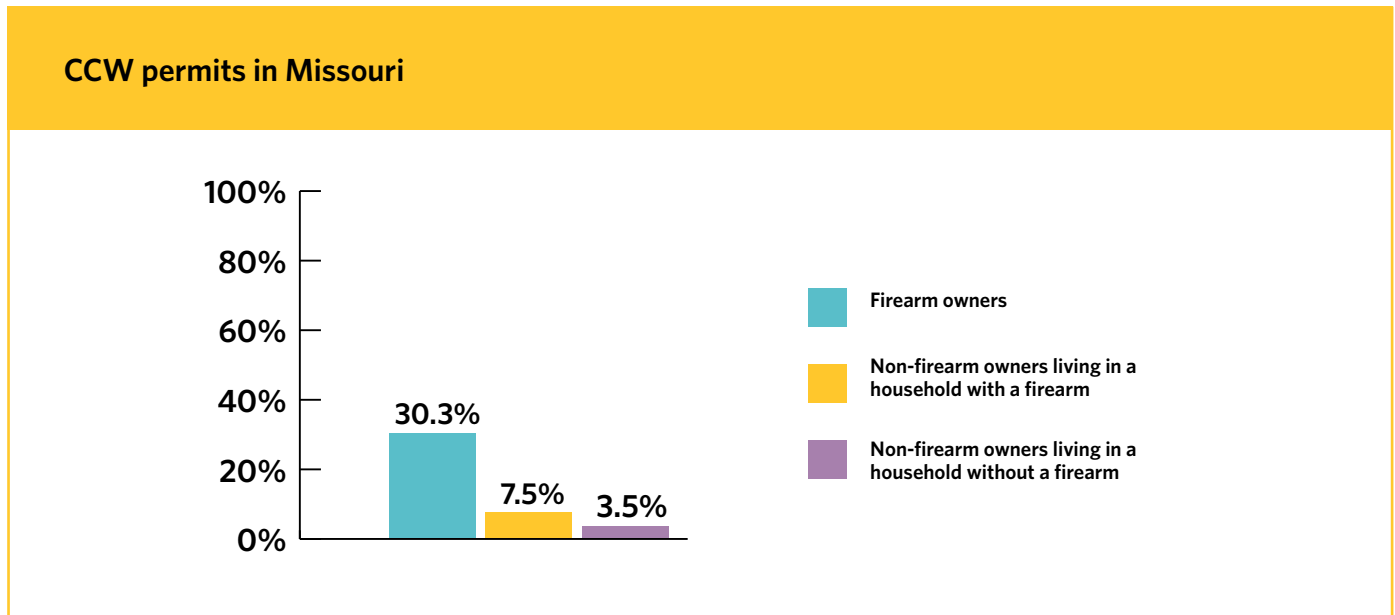


Figure 9

Further, among CCW permit holders, the average length of years CCW permits were held was 6.65 years. Notably, the duration of CCW permit ownership differed based on firearm ownership. For firearm owners, the average permit duration was 7.51 years. Among non-firearm owners living in households with or without firearms, the average permit durations were 2.68 years and 3.79 years, respectively (Figure 10).

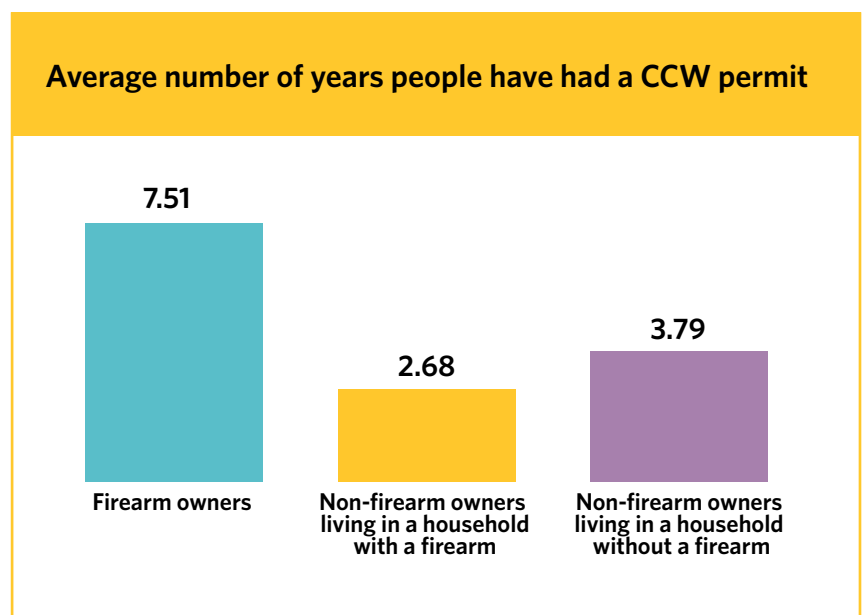


Figure 10

A significant proportion of CCW permit holders (41.8%) acquired their latest firearm primarily through a gun store. The next frequent source of purchase was a sporting goods store, big box store, or agriculture/farming supply store (31.0%). A smaller percentage obtained their most recent firearm from a gun show (7.1%) or a flea market/pawn shop (4.3%). Lastly, 15.8% of CCW permit holders procured their most recent firearm from an unspecified location or by other means not covered in the survey, such as purchasing from a family member (Figure 11).

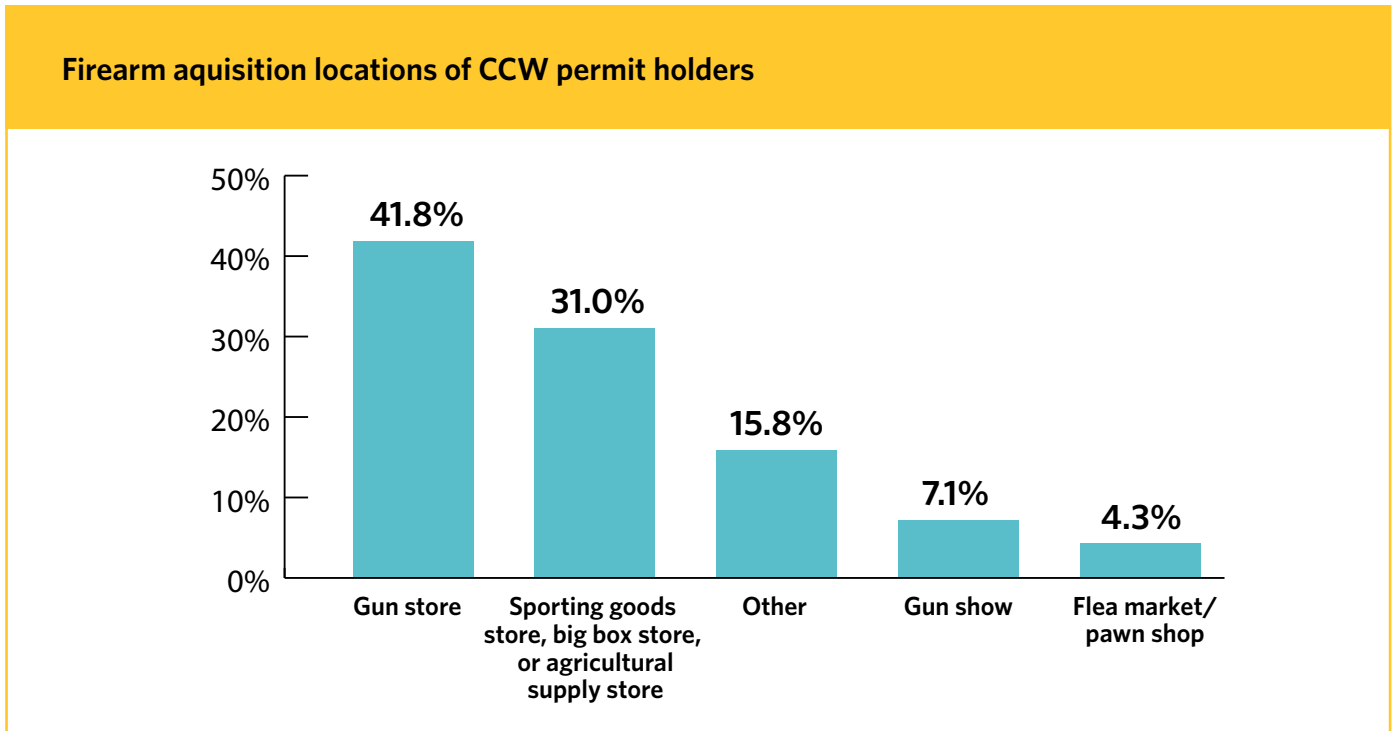


Figure 11

We examined individual, family, and community level factors that influence whether firearm owners obtained a CCW permit. Gun owners between the ages of 30-44 and those over 60 had a higher probability of obtaining a CCW permit relative to the 18- to 29-year-olds, and similarly, non-Hispanic, Black respondents had a greater chance of receiving a CCW permit compared to non-Hispanic, white respondents. Moreover, individuals who received firearms training, whether or not it included suicide prevention, live in suburban or rural regions, and own firearms for self-protection displayed a higher likelihood of having a CCW permit (Table 5).

Predictors of agreement with carrying guns in public space (firearm owners)

Less likely to agree with firearm carriage in public places	More likely to agree with firearm carriage in public places
<ul style="list-style-type: none"> No significant predictors 	<ul style="list-style-type: none"> Ages 30-44 and Ages 60+ Non-Hispanic, Black respondents Firearms training with or without a suicide prevention component Live in suburban and rural areas Firearm ownership for protection

Table 5

Missouri Data in Context: Nationally, individuals that lived in permitless carry states (like Missouri) were more likely to carry their handgun. In aggregate, 33% of handgun owners living in permitless carry states carried handguns in the last 30 days. The analyses from these national studies, however, did not describe how many people in permitless carry states had a permit, where those with permits obtained their firearms, or which groups were more likely to have permits; these are unique aspects of Missouri data. That said, have a concealed carry permit may play an important role in firearm injury prevention. Four studies have shown that more permissive concealed-carry laws increase firearm homicides and homicides in general.³⁻⁶ In one study comparing may-issue (more restrictive) policies to shall-issue (less restrictive) policies, researchers found significantly elevated rates of total homicide and firearm homicide.²⁸ By instituting a may-issue law rather than allowing permitless carry, firearm homicides and homicides in general in Missouri could be reduced.

Obtaining a permit in Missouri includes a training requirement, so it could be concluded that those more likely to have a permit are also more likely to have received formal firearms training. Notably, firearm training required for obtaining a permit does not utilize a standardized curriculum and may vary widely across training programs. Additionally, the permit requires taking a National Rifle Association-sponsored online training course, which may not provide unbiased or thorough information. This topic covered further in the Firearm Training-focused report.

Implications for research and practice: CCW permits may have little impact on the firearm injury and deaths in Missouri. Since CCW permits are not required in order to carry a firearm, the majority of people do not use them. Future research could delve into why those who have CCWs decided to get them; potential reasons could be wanting to carry in other states or that their CCW was already in place prior to Missouri becoming a permitless state. Open, permitless carry has an association with increasing violent crime and officer-involved shootings, suggesting that increased perceived threats could increase use of firearms in conflicts.^{27,30} With more research, more definite evidence around suicide, unintentional injury and mass shootings will likely emerge.²⁷ Generally, firearm injury experts believe that permitless carry do more harm than good and engaging in at least a permitting and vetting policy for those seeking to carry their firearm (also called “may issue” policy) could reduce the risk for firearm injury and death.²⁹ Due to the recent US Supreme Court Bruen decision, this sort of policy is considered unconstitutional.

FUTURE DIRECTIONS FOR RESEARCH & PRACTICE

Background checks and firearm carriage are primary ways by which people interact with firearms. They are also two potential avenues for policy and public health intervention. As with most firearm injury prevention programs, the potential prevention efforts must be culturally tailored, correct misconceptions related to background checks and firearm carriage, and promote empirical evidence about the benefits of expanding background checks and limiting firearm carriage in public places. The MFS sheds insights into Missourians’ attitudes and experiences related to background checks and firearm carriage. To advance firearm injury prevention, researchers must understand firearm owners’ attitudes and knowledge related to background checks, particularly around federal/state requirements and voluntary utilization.

- Additional research is needed to learn more about the concerns firearm owners have about firearm carriage in public places and identify trusted messengers to communicate the risks associated with firearm carriage.
- Investigate whether the formal training required for obtaining a CCW permit improves firearm safety knowledge and practice related to firearm carriage.
- Understand the multifaceted reasons for why firearm owners obtained CCWs and determine whether specific reasons (e.g., protection against strangers) contribute to firearm carriage in public places. evaluating multiple steps firearm owners would take to prevent firearm suicide.

REFERENCES

LIMITATIONS

Limitations related to overall survey methodology are included in the [introductory report](#). Nevertheless, this report also has several limitations that could be developed for future research.

1. The MFS cannot elucidate why half of firearm owners did not agree with the statement, “Whether it is legal or not, it is not acceptable to sell a gun to a stranger without a background check.” To gain a deeper understanding of attitudes towards background checks in firearm sales to strangers, it is crucial to explore the reasons why some firearm owners disagree with this position.
2. Approximately one in ten firearm owners in Missouri were uncertain about whether they underwent a background check for their most recent firearm purchase. For future research, providing a clear definition of what constitutes a background check may be critical to obtaining more accurate and reliable information on prior background check experiences.
3. The MFS found that approximately three out of four Missouri adults who had carried a loaded handgun in the past month did so to protect themselves against other people. While carrying a firearm is identified as a risk factor for firearm injury, little is known about the specific conditions under which these adults carried their guns. For example, were they intoxicated? Did they carry due to a real threat of violence, or because of a generalized worldview that people are dangerous? This context is vital for the development of effective firearm injury prevention programs.
4. Less than half of Missouri firearm owners are comfortable with carrying firearms in locations such as schools, college campuses, bars, government buildings, and sports stadiums. In contrast, a majority are comfortable carrying in restaurants, retail stores, service settings, and places of worship. Our data cannot speak to why these variations exist across public settings. It is important for future research to explore these variations using qualitative methods such as focus groups or key informant interviews.

REFERENCES

1. Giffords Law Center. Background Check Procedures in Missouri. Giffords. Published March 9, 2023. Accessed September 6, 2023. <https://giffords.org/state-laws/background-check-procedures-in-missouri/>
2. Giffords Law Center. Concealed Carry in Missouri. Giffords. Published January 3, 2023. Accessed September 6, 2023. <https://giffords.org/lawcenter/state-laws/concealed-carry-in-missouri/>
3. Doucette ML, Crifasi CK, Frattaroli S. Right-to-Carry Laws and Firearm Workplace Homicides: A Longitudinal Analysis (1992–2017). *Am J Public Health*. 2019;109(12):1747-1753. doi:10.2105/AJPH.2019.305307
4. Fridel EE, Fox JA. Gender Differences in Patterns and Trends in U.S. Homicide, 1976–2017. *Violence and Gender*. 2019;6(1):27-36. doi:10.1089/vio.2019.0005
5. Knopov A, Siegel M, Xuan Z, Rothman EF, Cronin SW, Hemenway D. The Impact of State Firearm Laws on Homicide Rates among Black and White Populations in the United States, 1991–2016. *Health & Social Work*. 2019;44(4):232-240. doi:10.1093/hsw/hlz024
6. Siegel M, Pahn M, Xuan Z, Fleegler E, Hemenway D. The Impact of State Firearm Laws on Homicide and Suicide Deaths in the USA, 1991–2016: a Panel Study. *Journal of General Internal Medicine*. 2019;34(10):2021-2028. doi:10.1007/s11606-019-04922-x
7. Morral A. The Effects of Concealed-Carry Laws. Published January 10, 2023. Accessed September 6, 2023. <https://www.rand.org/research/gun-policy/analysis/concealed-carry.html>
8. Giffords Law Center. Missouri Gun Laws. Giffords. Published 2023. Accessed September 6, 2023. <https://giffords.org/gun-laws/states/missouri/>
9. Giffords Law Center. Universal Background Checks in Missouri. Giffords. Published January 5, 2023. Accessed September 6, 2023. <https://giffords.org/lawcenter/state-laws/universal-background-checks-in-missouri/>
10. Giffords Law Center. Location Restrictions in Missouri. Giffords. Published January 5, 2023. Accessed September 6, 2023. <https://giffords.org/lawcenter/state-laws/location-restrictions-in-missouri/>
11. Hemenway, D., Azrael, D., & Miller, M. (2018). Selling a gun to a stranger without a background check: acceptable behaviour?. *Injury prevention*, 24(3), 213-217.
12. Grene K, Dharani A, Siegel M. Gun owners' assessment of gun safety policy: their underlying principles and detailed opinions. *Injury Epidemiology*. 2023;10(1):21. doi:10.1186/s40621-023-00430-z
13. Federal Bureau of Investigation. 2020-2021 NICS Operations Report. Federal Bureau of Investigation. Accessed August 16, 2023. <https://www.fbi.gov/file-repository/nics-2020-2021-operations-report.pdf/view>
14. Giffords Law Center. Universal Background Checks. Giffords. Published 2023. Accessed September 6, 2023. <https://giffords.org/gun-laws/policy-areas/background-checks/universal-background-checks/>
15. Stein P. ATF proposes rules that expand who must conduct gun background checks. *Washington Post*. <https://www.washingtonpost.com/national-security/2023/08/31/atf-gun-show-rules-fflfs/>. Published August 31, 2023. Accessed September 6, 2023.
16. Siegel M, Boine C. What Are the Most Effective Policies in Reducing Gun Homicides? Rockefeller Institute of Government; 2019. <https://bit.ly/2YPAz7P>
17. Fleegler EW, Lee LK, Monuteaux MC, Hemenway D, Mannix R. Firearm Legislation and Firearm-Related Fatalities in the United States. *JAMA Internal Medicine*. 2013;173(9):732-740. doi:10.1001/jamainternmed.2013.1286
18. Webster DW, Vernick JS, Bulzacchelli MT. Effects of State-Level Firearm Seller Accountability Policies on Firearm Trafficking. *J Urban Health*. 2009;86(4):525-537. doi:10.1007/s11524-009-9351-x
19. Good C. The Case Against Gun Background Checks. *ABC News*. Published April 10, 2013. Accessed September 6, 2023. <http://abcnews.go.com/blogs/politics/2013/04/the-case-against-gun-background-checks>
20. Wolfson, J. A., Teret, S. P., Azrael, D., & Miller, M. (2017). US Public Opinion on Carrying Firearms in Public Places. *American Journal of Public Health*, 107(6), 929-937. <https://doi.org/10.2105/AJPH.2017.303712>
21. Ketterer, A. R., Poland, S., Ray, K., Abuhasira, R., & Aldeen, A. Z. (2020). Emergency providers' familiarity with firearms: a national survey. *Academic emergency medicine*, 27(3), 185-194.
22. Lynch, K. R., Logan, T. K., & Jackson, D. B. (2018). "People will bury their guns before they surrender them": implementing domestic violence gun control in rural, appalachian versus urban communities. *Rural sociology*, 83(2), 315-346.
23. Boine, C., Caffrey, K., & Siegel, M. (2022). Who Are Gun Owners in the United States? A Latent Class Analysis of the 2019 National Lawful Use of Guns Survey. *Sociological Perspectives*, 65(1), 35–57. <https://doi.org/10.1177/07311214211028619>
24. Parker K, Menasce Horowitz J, Igielnick R, Oliphant JB, Brown A. 2. Guns and daily life: Identity, experiences, activities and involvement. Pew Research Center's Social & Demographic Trends Project. Published June 22, 2017. Accessed September 6, 2023. <https://www.pewresearch.org/social-trends/2017/06/22/guns-and-daily-life-identity-experiences-activities-and-involvement/>
25. Rowhani-Rahbar A, Gallagher A, Azrael D, Miller M. Trend in Loaded Handgun Carrying Among Adult Handgun Owners in the United States, 2015–2019. *Am J Public Health*. 2022;112(12):1783-1790. doi:10.2105/AJPH.2022.307094
26. Everytown for Gun Safety Action Fund. (2022). At a Glance: Missouri. Everytown for Gun Safety. <https://www.everytown.org/state/missouri/>
27. Morral A. The Effects of Concealed-Carry Laws. RAND Corporation. Published January 10, 2023. Accessed September 6, 2023. <https://www.rand.org/research/gun-policy/analysis/concealed-carry.html>
28. Siegel M, Xuan Z, Ross CS, et al. Easiness of Legal Access to Concealed Firearm Permits and Homicide Rates in the United States. *Am J Public Health*. 2017;107(12):1923-1929. doi:10.2105/AJPH.2017.304057
29. Ulrich MR. Public Carry versus Public Health — The Harms to Come from the Supreme Court's Decision in Bruen. *N Engl J Med*. 2022;387(14):1245-1247. doi:10.1056/NEJMp2210269
30. Doucette ML, Ward JA, McCourt AD, Webster D, Crifasi CK. Officer-Involved Shootings and Concealed Carry Weapons Permitting Laws: Analysis of Gun Violence Archive Data, 2014–2020. *Journal of Urban Health*. 2022;99(3):373-384. doi:10.1007/s11524-022-00627-5